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Mewbourne Oil Company

30-015-44481

Eddy County, New Mexico (Nad 83)

Sec 25, T23S, R26E

Ghostrider 25/36 W0AP Federal Com #1H

Wellbore #1

Design: Wellbore #1

QES Survey Report

30 July, 2018





Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Ghost rider 25/36 W0AP Federal Com #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3248.0usft (Patterson #230)
Site:	Sec 25, T23S, R26E	MD Reference:	WELL @ 3248.0usft (Patterson #230)
Well:	Ghost rider 25/36 W0AP Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Eddy County, New Mexico (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 25, T23S, R26E		
Site Position:		Northing:	466,454.50 usft
From:	Map	Easting:	570,342.40 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 16' 56.362 N
		Longitude:	104° 14' 22.117 W
		Grid Convergence:	0.05 °

Well	Ghost rider 25/36 W0AP Federal Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 466,454.69 usft
	+E/-W	0.0 usft	Easting: 570,392.50 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 16' 56.363 N
		Longitude:	104° 14' 21.533 W
		Ground Level:	3,221.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/15/2018	7.16	60.00	47,800.36480062

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.77	

Survey Program	Date 7/24/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
113.0	479.0	TrueShot Surveys (Wellbore #1)	MWD default	MWD - Standard
568.0	18,875.0	QES MWD Surveys (Wellbore #1)	OWSG (Rev2) MWD	OWSG MWD - Standard

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
113.0	0.30	130.90	113.0	-0.2	0.2	0.2	0.27	0.27	0.00
204.0	0.30	115.50	204.0	-0.5	0.6	0.5	0.09	0.00	-16.92
323.0	0.60	21.90	323.0	0.0	1.1	0.0	0.58	0.25	-78.66
TrueShot Tie-In @ 479.0' MD / 479.0' TVD									
479.0	0.50	95.50	479.0	0.7	2.1	-0.7	0.43	-0.06	47.18
568.0	0.80	68.10	568.0	0.9	3.1	-0.9	0.48	0.34	-30.79
660.0	1.10	68.10	660.0	1.4	4.5	-1.4	0.33	0.33	0.00
752.0	1.10	62.30	752.0	2.2	6.1	-2.2	0.12	0.00	-6.30
848.0	1.10	62.00	847.9	3.0	7.7	-3.0	0.01	0.00	-0.31

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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
942.0	1.20	60.90	941.9	4.0	9.4	-3.9	0.11	0.11	-1.17
1,037.0	1.30	73.20	1,036.9	4.7	11.3	-4.7	0.30	0.11	12.95
1,131.0	1.70	83.20	1,130.9	5.2	13.7	-5.2	0.51	0.43	10.64
1,225.0	2.00	88.00	1,224.8	5.4	16.7	-5.4	0.36	0.32	5.11
1,320.0	0.60	56.90	1,319.8	5.8	18.8	-5.7	1.60	-1.47	-32.74
1,414.0	0.60	37.30	1,413.8	6.4	19.5	-6.4	0.22	0.00	-20.85
1,509.0	1.10	66.20	1,508.8	7.2	20.6	-7.1	0.68	0.53	30.42
1,603.0	1.70	81.30	1,602.7	7.8	22.8	-7.7	0.74	0.64	16.06
1,698.0	0.90	75.50	1,697.7	8.2	24.9	-8.1	0.85	-0.84	-6.11
1,793.0	0.60	82.70	1,792.7	8.4	26.2	-8.3	0.33	-0.32	7.58
1,815.0	0.50	73.60	1,814.7	8.5	26.4	-8.4	0.60	-0.45	-41.36
1,899.0	0.30	61.80	1,898.7	8.7	26.9	-8.6	0.26	-0.24	-14.05
1,994.0	1.50	9.20	1,993.7	10.0	27.3	-9.9	1.41	1.26	-55.37
2,088.0	2.10	0.30	2,087.6	13.0	27.5	-12.8	0.70	0.64	-9.47
2,182.0	2.00	354.50	2,181.6	16.3	27.4	-16.2	0.24	-0.11	-6.17
2,277.0	2.00	355.30	2,276.5	19.6	27.1	-19.5	0.03	0.00	0.84
2,371.0	2.00	353.20	2,370.5	22.9	26.8	-22.8	0.08	0.00	-2.23
2,466.0	2.10	346.90	2,465.4	26.2	26.2	-26.1	0.26	0.11	-6.63
2,561.0	2.00	348.80	2,560.4	29.5	25.5	-29.4	0.13	-0.11	2.00
2,655.0	2.10	338.80	2,654.3	32.7	24.5	-32.7	0.39	0.11	-10.64
2,750.0	2.10	337.80	2,749.2	36.0	23.2	-35.9	0.04	0.00	-1.05
2,845.0	1.90	334.60	2,844.2	39.0	21.9	-38.9	0.24	-0.21	-3.37
2,939.0	1.90	334.80	2,938.1	41.8	20.6	-41.8	0.01	0.00	0.21
3,034.0	2.50	345.10	3,033.0	45.3	19.4	-45.2	0.75	0.63	10.84
3,128.0	2.50	352.90	3,127.0	49.3	18.6	-49.2	0.36	0.00	8.30
3,223.0	1.60	16.30	3,221.9	52.6	18.7	-52.5	1.28	-0.95	24.63
3,317.0	1.50	19.80	3,315.9	55.0	19.5	-54.9	0.15	-0.11	3.72
3,412.0	1.40	13.30	3,410.8	57.3	20.2	-57.2	0.20	-0.11	-6.84
3,504.0	1.20	16.80	3,502.8	59.3	20.7	-59.3	0.23	-0.22	3.80
3,598.0	1.10	0.30	3,596.8	61.2	21.0	-61.1	0.37	-0.11	-17.55
3,692.0	1.10	345.70	3,690.8	63.0	20.8	-62.9	0.30	0.00	-15.53
3,787.0	1.70	357.80	3,785.7	65.3	20.5	-65.2	0.70	0.63	12.74
3,881.0	1.70	349.50	3,879.7	68.0	20.2	-67.9	0.26	0.00	-8.83
3,976.0	1.70	337.60	3,974.7	70.7	19.4	-70.6	0.37	0.00	-12.53
4,071.0	1.90	327.40	4,069.6	73.3	18.0	-73.3	0.40	0.21	-10.74
4,165.0	1.90	323.50	4,163.6	75.9	16.2	-75.8	0.14	0.00	-4.15
4,260.0	1.90	356.90	4,258.5	78.7	15.2	-78.7	1.15	0.00	35.16
4,355.0	2.50	25.70	4,353.4	82.2	16.0	-82.1	1.30	0.63	30.32
4,449.0	1.10	25.70	4,447.4	84.8	17.3	-84.8	1.49	-1.49	0.00
4,544.0	0.80	7.10	4,542.4	86.3	17.8	-86.2	0.45	-0.32	-19.58
4,638.0	0.70	4.10	4,636.4	87.5	17.9	-87.5	0.11	-0.11	-3.19
4,733.0	0.80	8.20	4,731.4	88.8	18.1	-88.7	0.12	0.11	4.32
4,827.0	0.90	17.30	4,825.4	90.1	18.4	-90.1	0.18	0.11	9.68

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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,922.0	0.70	17.80	4,920.4	91.4	18.8	-91.3	0.21	-0.21	0.53
5,016.0	0.50	23.80	5,014.3	92.3	19.1	-92.2	0.22	-0.21	6.38
5,111.0	0.90	6.80	5,109.3	93.4	19.4	-93.4	0.47	0.42	-17.89
5,205.0	0.80	359.40	5,203.3	94.8	19.4	-94.8	0.16	-0.11	-7.87
5,300.0	1.50	24.00	5,298.3	96.6	19.9	-96.5	0.89	0.74	25.89
5,394.0	1.50	34.40	5,392.3	98.8	21.1	-98.7	0.29	0.00	11.06
5,489.0	1.00	21.40	5,487.3	100.6	22.1	-100.5	0.60	-0.53	-13.68
5,583.0	0.80	33.30	5,581.2	101.9	22.8	-101.8	0.29	-0.21	12.66
5,678.0	0.50	23.10	5,676.2	102.8	23.3	-102.7	0.34	-0.32	-10.74
5,773.0	0.90	42.30	5,771.2	103.7	24.0	-103.6	0.48	0.42	20.21
5,867.0	0.90	52.30	5,865.2	104.7	25.1	-104.6	0.17	0.00	10.64
5,962.0	1.10	70.90	5,960.2	105.5	26.5	-105.4	0.40	0.21	19.58
6,056.0	1.30	51.20	6,054.2	106.5	28.2	-106.3	0.48	0.21	-20.96
6,151.0	1.60	26.50	6,149.2	108.3	29.6	-108.2	0.72	0.32	-26.00
6,245.0	1.60	30.80	6,243.1	110.6	30.9	-110.5	0.13	0.00	4.57
6,340.0	1.90	25.90	6,338.1	113.2	32.3	-113.1	0.35	0.32	-5.16
6,435.0	1.70	22.00	6,433.0	115.9	33.5	-115.8	0.25	-0.21	-4.11
6,529.0	1.60	21.40	6,527.0	118.4	34.5	-118.3	0.11	-0.11	-0.64
6,624.0	1.40	29.60	6,622.0	120.7	35.5	-120.5	0.31	-0.21	8.63
6,719.0	1.10	18.90	6,716.9	122.5	36.4	-122.4	0.40	-0.32	-11.26
6,813.0	1.10	11.30	6,810.9	124.3	36.9	-124.1	0.16	0.00	-8.09
6,908.0	0.90	358.90	6,905.9	125.9	37.0	-125.8	0.31	-0.21	-13.05
7,003.0	0.60	356.20	7,000.9	127.2	37.0	-127.0	0.32	-0.32	-2.84
7,098.0	1.00	343.20	7,095.9	128.4	36.7	-128.3	0.46	0.42	-13.68
7,192.0	1.60	0.10	7,189.9	130.5	36.5	-130.4	0.75	0.64	17.98
7,287.0	1.30	1.80	7,284.8	132.9	36.5	-132.8	0.32	-0.32	1.79
7,382.0	1.50	18.50	7,379.8	135.2	37.0	-135.1	0.48	0.21	17.58
7,476.0	1.20	15.40	7,473.8	137.3	37.6	-137.2	0.33	-0.32	-3.30
7,571.0	0.60	10.60	7,568.8	138.8	38.0	-138.6	0.64	-0.63	-5.05
7,666.0	1.90	25.40	7,663.7	140.7	38.7	-140.5	1.40	1.37	15.58
7,761.0	1.40	40.70	7,758.7	143.0	40.2	-142.8	0.70	-0.53	16.11
7,856.0	1.20	28.60	7,853.7	144.7	41.4	-144.6	0.36	-0.21	-12.74
7,951.0	2.10	0.60	7,948.6	147.3	41.9	-147.2	1.25	0.95	-29.47
8,045.0	2.10	346.40	8,042.6	150.7	41.5	-150.6	0.55	0.00	-15.11
8,140.0	1.90	336.50	8,137.5	153.9	40.5	-153.7	0.42	-0.21	-10.42
8,235.0	1.90	329.70	8,232.5	156.7	39.0	-156.5	0.24	0.00	-7.16
8,300.0	1.50	329.80	8,297.4	158.3	38.1	-158.2	0.62	-0.62	0.15
8,381.0	3.30	180.30	8,378.4	156.9	37.5	-156.8	5.75	2.22	-184.57
8,413.0	7.60	176.00	8,410.2	153.9	37.7	-153.7	13.49	13.44	-13.44
8,444.0	11.00	171.60	8,440.8	148.9	38.2	-148.8	11.20	10.97	-14.19
8,476.0	13.60	171.30	8,472.1	142.2	39.3	-142.0	8.13	8.13	-0.94
8,507.0	17.20	172.00	8,502.0	134.0	40.4	-133.9	11.63	11.61	2.26
8,539.0	21.80	173.60	8,532.1	123.4	41.8	-123.3	14.47	14.38	5.00



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Design: Wellbore #1

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8,571.0	25.70	177.80	8,561.4	110.6	42.7	-110.4	13.28	12.19	13.13
8,602.0	30.30	181.10	8,588.8	96.1	42.8	-95.9	15.65	14.84	10.65
8,634.0	35.30	182.20	8,615.7	78.7	42.3	-78.6	15.73	15.63	3.44
8,665.0	39.40	181.70	8,640.3	59.9	41.7	-59.8	13.26	13.23	-1.61
8,697.0	41.90	181.10	8,664.6	39.1	41.2	-38.9	7.91	7.81	-1.88
8,729.0	45.60	179.40	8,687.7	17.0	41.1	-16.8	12.13	11.56	-5.31
8,760.0	48.60	178.90	8,708.8	-5.7	41.4	5.9	9.75	9.68	-1.61
8,792.0	51.70	179.00	8,729.3	-30.3	41.9	30.4	9.69	9.69	0.31
8,824.0	54.50	178.50	8,748.5	-55.9	42.4	56.0	8.84	8.75	-1.56
8,855.0	57.90	178.00	8,765.8	-81.6	43.2	81.8	11.05	10.97	-1.61
8,887.0	63.10	178.10	8,781.5	-109.4	44.2	109.6	16.25	16.25	0.31
8,919.0	67.40	179.70	8,794.9	-138.5	44.7	138.7	14.18	13.44	5.00
HL Crossed @ 8926.0' MD / 8797.6' TVD									
8,926.0	68.14	180.16	8,797.6	-145.0	44.7	145.1	12.23	10.62	6.56
8,950.0	70.70	181.70	8,806.0	-167.4	44.3	167.6	12.23	10.65	6.42
8,981.0	73.40	182.40	8,815.5	-196.9	43.3	197.1	8.97	8.71	2.26
9,013.0	77.10	183.40	8,823.7	-227.8	41.7	228.0	11.95	11.56	3.13
9,045.0	81.60	183.40	8,829.6	-259.2	39.9	259.3	14.06	14.06	0.00
9,065.0	84.30	183.90	8,832.1	-279.0	38.6	279.1	13.73	13.50	2.50
9,165.0	88.30	183.60	8,838.5	-378.5	32.1	378.7	4.01	4.00	-0.30
9,261.0	88.00	183.60	8,841.6	-474.3	26.0	474.4	0.31	-0.31	0.00
9,356.0	87.70	182.00	8,845.2	-569.1	21.4	569.2	1.71	-0.32	-1.68
9,451.0	92.10	180.40	8,845.3	-664.1	19.4	664.1	4.93	4.63	-1.68
9,545.0	92.50	180.60	8,841.6	-758.0	18.6	758.1	0.48	0.43	0.21
9,640.0	92.10	180.80	8,837.8	-852.9	17.4	853.0	0.47	-0.42	0.21
9,735.0	90.20	180.10	8,835.8	-947.9	16.7	947.9	2.13	-2.00	-0.74
9,829.0	88.40	179.00	8,837.0	-1,041.9	17.4	1,041.9	2.24	-1.91	-1.17
9,923.0	88.70	179.60	8,839.4	-1,135.8	18.6	1,135.9	0.71	0.32	0.64
10,018.0	87.00	178.70	8,842.9	-1,230.7	20.0	1,230.8	2.02	-1.79	-0.95
10,112.0	87.00	177.60	8,847.9	-1,324.6	23.0	1,324.6	1.17	0.00	-1.17
10,207.0	90.90	176.40	8,849.6	-1,419.4	28.0	1,419.5	4.30	4.11	-1.26
10,301.0	93.50	176.70	8,846.0	-1,513.1	33.6	1,513.3	2.78	2.77	0.32
10,396.0	91.60	177.80	8,841.8	-1,607.9	38.2	1,608.1	2.31	-2.00	1.16
10,491.0	90.30	177.30	8,840.2	-1,702.8	42.3	1,703.0	1.47	-1.37	-0.53
10,585.0	89.90	178.50	8,840.0	-1,796.8	45.7	1,796.9	1.35	-0.43	1.28
10,680.0	90.20	180.40	8,839.9	-1,891.8	46.6	1,891.9	2.02	0.32	2.00
10,774.0	91.00	181.00	8,839.0	-1,985.8	45.5	1,985.9	1.06	0.85	0.64
10,869.0	90.60	181.30	8,837.6	-2,080.7	43.6	2,080.9	0.53	-0.42	0.32
10,963.0	88.80	180.60	8,838.1	-2,174.7	42.0	2,174.9	2.05	-1.91	-0.74
11,058.0	89.10	181.10	8,839.9	-2,269.7	40.6	2,269.8	0.61	0.32	0.53
11,152.0	89.00	181.70	8,841.4	-2,363.6	38.3	2,363.8	0.65	-0.11	0.64
11,247.0	90.10	181.10	8,842.2	-2,458.6	36.0	2,458.7	1.32	1.16	-0.63
11,342.0	90.30	180.30	8,841.8	-2,553.6	34.8	2,553.7	0.87	0.21	-0.84
11,437.0	91.10	181.00	8,840.7	-2,648.6	33.7	2,648.7	1.12	0.84	0.74



Survey Report



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico (Nad 83)
Site: Sec 25, T23S, R26E
Well: Ghost rider 25/36 W0AP Federal Com #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Ghost rider 25/36 W0AP Federal Com #1H
TVD Reference: WELL @ 3248.0usft (Patterson #230)
MD Reference: WELL @ 3248.0usft (Patterson #230)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,531.0	91.30	181.30	8,838.7	-2,742.5	31.8	2,742.6	0.38	0.21	0.32
11,626.0	90.60	181.10	8,837.1	-2,837.5	29.9	2,837.6	0.77	-0.74	-0.21
11,721.0	90.00	181.50	8,836.6	-2,932.5	27.7	2,932.6	0.76	-0.63	0.42
11,816.0	92.70	182.40	8,834.4	-3,027.4	24.5	3,027.5	3.00	2.84	0.95
11,910.0	91.30	181.00	8,831.1	-3,121.3	21.7	3,121.3	2.11	-1.49	-1.49
12,004.0	89.10	179.40	8,830.8	-3,215.3	21.4	3,215.3	2.89	-2.34	-1.70
12,099.0	92.20	179.40	8,829.7	-3,310.3	22.3	3,310.3	3.26	3.26	0.00
12,193.0	89.00	179.00	8,828.7	-3,404.2	23.7	3,404.3	3.43	-3.40	-0.43
12,288.0	89.30	178.90	8,830.1	-3,499.2	25.4	3,499.3	0.33	0.32	-0.11
12,383.0	90.80	179.90	8,830.1	-3,594.2	26.4	3,594.3	1.90	1.58	1.05
12,477.0	89.90	179.40	8,829.5	-3,688.2	27.0	3,688.3	1.10	-0.96	-0.53
12,571.0	88.30	179.00	8,831.0	-3,782.2	28.3	3,782.2	1.75	-1.70	-0.43
12,666.0	87.60	178.90	8,834.4	-3,877.1	30.0	3,877.2	0.74	-0.74	-0.11
12,760.0	88.60	179.40	8,837.5	-3,971.0	31.4	3,971.1	1.19	1.06	0.53
12,854.0	93.00	179.60	8,836.2	-4,065.0	32.2	4,065.1	4.69	4.68	0.21
12,949.0	91.30	179.20	8,832.6	-4,159.9	33.2	4,160.0	1.84	-1.79	-0.42
13,043.0	87.80	177.40	8,833.3	-4,253.8	36.0	4,254.0	4.19	-3.72	-1.91
13,138.0	91.10	178.70	8,834.2	-4,348.8	39.3	4,348.9	3.73	3.47	1.37
13,232.0	91.20	178.90	8,832.4	-4,442.7	41.2	4,442.9	0.24	0.11	0.21
13,326.0	89.60	178.90	8,831.7	-4,536.7	43.0	4,536.8	1.70	-1.70	0.00
13,421.0	93.50	179.60	8,829.1	-4,631.6	44.3	4,631.8	4.17	4.11	0.74
13,515.0	90.70	180.40	8,825.7	-4,725.6	44.3	4,725.7	3.10	-2.98	0.85
13,610.0	89.60	181.70	8,825.4	-4,820.6	42.5	4,820.7	1.79	-1.16	1.37
13,704.0	92.10	183.10	8,824.0	-4,914.5	38.6	4,914.6	3.05	2.66	1.49
13,799.0	89.80	182.20	8,822.5	-5,009.3	34.2	5,009.4	2.60	-2.42	-0.95
13,893.0	90.30	182.50	8,822.4	-5,103.2	30.3	5,103.3	0.62	0.53	0.32
13,988.0	89.50	180.40	8,822.6	-5,198.2	27.9	5,198.3	2.37	-0.84	-2.21
14,082.0	90.30	180.60	8,822.7	-5,292.2	27.1	5,292.3	0.88	0.85	0.21
14,176.0	88.00	182.00	8,824.1	-5,386.2	25.0	5,386.2	2.86	-2.45	1.49
14,271.0	88.20	181.70	8,827.3	-5,481.1	21.9	5,481.1	0.38	0.21	-0.32
14,365.0	93.10	182.90	8,826.2	-5,575.0	18.2	5,575.0	5.37	5.21	1.28
14,460.0	90.80	183.80	8,823.0	-5,669.7	12.6	5,669.7	2.60	-2.42	0.95
14,554.0	89.10	183.10	8,823.0	-5,763.6	6.9	5,763.5	1.96	-1.81	-0.74
14,648.0	90.60	180.60	8,823.3	-5,857.5	3.9	5,857.5	3.10	1.60	-2.66
14,742.0	87.10	180.80	8,825.2	-5,951.5	2.8	5,951.4	3.73	-3.72	0.21
14,836.0	87.60	179.60	8,829.5	-6,045.3	2.4	6,045.3	1.38	0.53	-1.28
14,930.0	91.60	179.60	8,830.2	-6,139.3	3.1	6,139.3	4.26	4.26	0.00
15,024.0	89.90	179.20	8,828.9	-6,233.3	4.1	6,233.3	1.86	-1.81	-0.43
15,118.0	91.70	179.60	8,827.6	-6,327.3	5.1	6,327.3	1.96	1.91	0.43
15,213.0	88.40	178.00	8,827.6	-6,422.3	7.1	6,422.2	3.86	-3.47	-1.68
15,308.0	91.40	178.70	8,827.7	-6,517.2	9.8	6,517.2	3.24	3.16	0.74
15,402.0	90.40	178.50	8,826.2	-6,611.2	12.1	6,611.2	1.08	-1.06	-0.21
15,496.0	92.10	179.00	8,824.2	-6,705.1	14.1	6,705.1	1.89	1.81	0.53

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Ghost rider 25/36 W0AP Federal Com #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3248.0usft (Patterson #230)
Site:	Sec 25, T23S, R26E	MD Reference:	WELL @ 3248.0usft (Patterson #230)
Well:	Ghost rider 25/36 W0AP Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,591.0	90.60	179.70	8,822.0	-6,800.1	15.2	6,800.1	1.74	-1.58	0.74
15,686.0	91.40	181.00	8,820.3	-6,895.1	14.6	6,895.1	1.61	0.84	1.37
15,780.0	85.00	180.60	8,823.2	-6,989.0	13.3	6,989.0	6.82	-6.81	-0.43
15,874.0	88.70	179.60	8,828.4	-7,082.8	13.2	7,082.8	4.08	3.94	-1.06
15,969.0	88.90	180.40	8,830.4	-7,177.8	13.2	7,177.8	0.87	0.21	0.84
16,063.0	89.90	178.70	8,831.4	-7,271.8	13.9	7,271.8	2.10	1.06	-1.81
16,158.0	90.50	176.90	8,831.1	-7,366.7	17.5	7,366.7	2.00	0.63	-1.89
16,252.0	93.60	175.50	8,827.7	-7,460.4	23.8	7,460.4	3.62	3.30	-1.49
16,347.0	92.70	174.80	8,822.5	-7,554.9	31.8	7,555.0	1.20	-0.95	-0.74
16,442.0	87.80	176.70	8,822.1	-7,649.6	38.8	7,649.7	5.53	-5.16	2.00
16,537.0	90.80	178.70	8,823.2	-7,744.5	42.6	7,744.6	3.80	3.16	2.11
16,631.0	92.30	180.10	8,820.7	-7,838.5	43.6	7,838.6	2.18	1.60	1.49
16,727.0	92.30	180.60	8,816.8	-7,934.4	43.0	7,934.5	0.52	0.00	0.52
16,821.0	90.80	181.00	8,814.3	-8,028.4	41.7	8,028.5	1.65	-1.60	0.43
16,916.0	89.20	181.30	8,814.3	-8,123.3	39.8	8,123.4	1.71	-1.68	0.32
17,011.0	90.00	181.00	8,814.9	-8,218.3	37.9	8,218.4	0.90	0.84	-0.32
17,106.0	90.50	181.30	8,814.5	-8,313.3	36.0	8,313.4	0.61	0.53	0.32
17,200.0	91.10	180.80	8,813.2	-8,407.3	34.3	8,407.3	0.83	0.64	-0.53
17,296.0	90.10	180.80	8,812.2	-8,503.2	32.9	8,503.3	1.04	-1.04	0.00
17,390.0	89.10	180.30	8,812.9	-8,597.2	32.0	8,597.3	1.19	-1.06	-0.53
17,485.0	88.50	180.30	8,814.9	-8,692.2	31.5	8,692.3	0.63	-0.63	0.00
17,580.0	88.70	180.30	8,817.2	-8,787.2	31.0	8,787.2	0.21	0.21	0.00
17,675.0	89.60	179.90	8,818.6	-8,882.2	30.9	8,882.2	1.04	0.95	-0.42
17,770.0	92.40	182.40	8,816.9	-8,977.1	29.0	8,977.2	3.95	2.95	2.63
17,864.0	92.10	182.40	8,813.2	-9,071.0	25.0	9,071.0	0.32	-0.32	0.00
17,959.0	88.00	180.60	8,813.2	-9,165.9	22.6	9,165.9	4.71	-4.32	-1.89
18,053.0	89.70	181.70	8,815.0	-9,259.9	20.7	9,259.9	2.15	1.81	1.17
18,147.0	87.50	182.50	8,817.3	-9,353.8	17.2	9,353.8	2.49	-2.34	0.85
18,242.0	88.50	183.20	8,820.7	-9,448.6	12.5	9,448.6	1.28	1.05	0.74
18,336.0	90.10	181.80	8,821.8	-9,542.5	8.4	9,542.5	2.26	1.70	-1.49
18,430.0	92.40	183.10	8,819.8	-9,636.4	4.4	9,636.3	2.81	2.45	1.38
18,525.0	90.40	182.00	8,817.4	-9,731.2	0.2	9,731.2	2.40	-2.11	-1.16
18,619.0	88.60	181.10	8,818.3	-9,825.2	-2.4	9,825.1	2.14	-1.91	-0.96
18,714.0	89.90	181.80	8,819.5	-9,920.2	-4.8	9,920.1	1.55	1.37	0.74
18,809.0	89.50	180.60	8,820.0	-10,015.1	-6.8	10,015.0	1.33	-0.42	-1.26
18,825.0	89.80	180.40	8,820.1	-10,031.1	-6.9	10,031.0	2.25	1.88	-1.25
TD @ 18875.0' MD / 8820.3' TVD									
18,875.0	89.80	180.40	8,820.3	-10,081.1	-7.3	10,081.0	0.00	0.00	0.00



Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Ghost rider 25/36 W0AP Federal Com #1H
Project:	Eddy County, New Mexico (Nad 83)	TVD Reference:	WELL @ 3248.0usft (Patterson #230)
Site:	Sec 25, T23S, R26E	MD Reference:	WELL @ 3248.0usft (Patterson #230)
Well:	Ghost rider 25/36 W0AP Federal Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
479.0	479.0	0.7	2.1	TrueShot Tie-In @ 479.0' MD / 479.0' TVD
8,926.0	8,797.6	-145.0	44.7	HL Crossed @ 8926.0' MD / 8797.6' TVD
18,875.0	8,820.3	-10,081.1	-7.3	TD @ 18875.0' MD / 8820.3' TVD

Checked By: _____	Approved By: _____	Date: _____
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Company Name: Mewbourne Oil Company
 Ghostdriller 25/36 W0AP Federal Com #1H
 Eddy County, New Mexico (Nad 83)
 Rig: Patterson 8230
 Created By: Shane Robbins
 Date: 7/24/2018

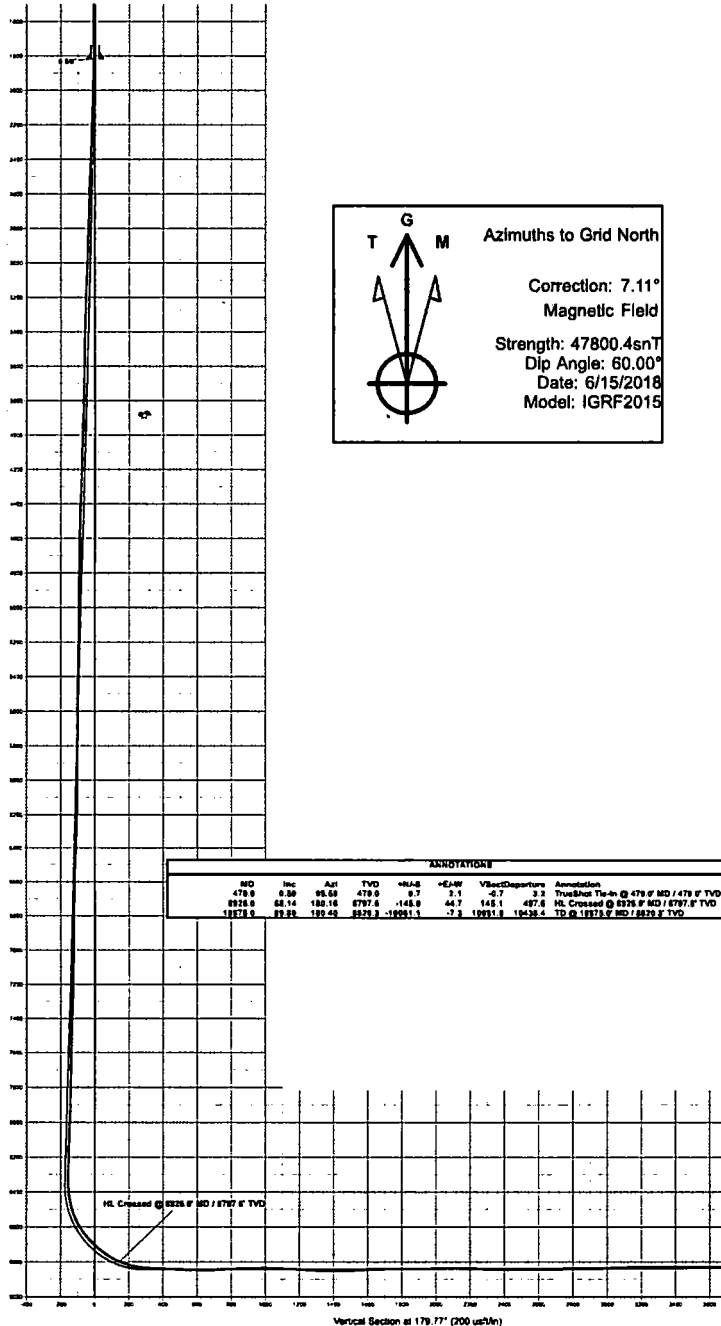
Ghostdriller 25/36 W0AP Federal Com #1H
 Eddy County, New Mexico (Nad 83)
 Q180788 & WT-180660
 Design #1



PROJECT DETAILS: Eddy County, New Mexico (Nad 83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS				Ghostdriller 25/36 W0AP Federal Com #1H			
MD	Inc	API	TVD	MD	Inc	API	TVD
479.8	8.56	85.68	479.8	8238.9	62.14	188.18	8238.9
8238.9	62.14	188.18	8238.9	18878.9	89.89	189.48	18878.9



Azimuths to Grid North

Correction: 7.11°
 Magnetic Field
 Strength: 47800.4snT
 Dip Angle: 60.00°
 Date: 6/15/2018
 Model: IGRF2015

MD	Inc	API	TVD	MD	Inc	API	TVD	MD	Inc	API	TVD
479.8	8.56	85.68	479.8	8238.9	62.14	188.18	8238.9	18878.9	89.89	189.48	18878.9

